AD 19/

243845

WHITE SANDS MISSILE RANGE

CLIMATE CALENDAR

BX

GEORGE M. FUGATE

AND

JOHN A. CHAMBERS

ATMORPHERIC SCIENCES LABORATORY WHITE SAMOS MISSILE RANGE, MEW MEXICO

FONT

UNITED STATES ARMY ELECTRONICS COMMAND

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
U 5 Department of Communication

#### DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

#### DISCLAPAER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

13. ABSTRACT

Security Classification				
DOCUM	IENT CONTROL DATA - R	& D .	•	
(Security classification of title, body of abatract	t and induzing annotation must be			
1. ORIGINATING ACTIVITY (Corporete author)	<b>.</b>	1	ECURITY CLASSIFICATION	
U. S. Army Electronics Co	mand	2b. GROUP	SSIFIED	
Ft. Monmouth, New Jersey	•	ZS. GROUP		
3. RCPORT TITLE				
WHITE SANDS MISSILE RANGE	CLIMATE CALENDAR			
4. DESCRIPTIVE NOTES (Type of isport and inclusive de	ites)			
5. AUTHOR(S) (First name, middle initiel, lest name)				
George M. Fugare and John	A. Chambers			
. REPORT DATE	7c. TOTAL NO. C	F PAGES	7b. NO. OF REFS	
April 1972	28		NONE	
88. CONTRACT OR GRANT NO.	Se. ORIGINATOR	S REPORT NUM	BER(\$)	
b. PROJECT NO.	DR-70	7		
DA Task 1T665702D127-02	Z 70			
с.	96. OTHER NEPO	RT NO(S) (Any	other numbers that may be assigned	
4				
10. DISTRIBUTION STATEMENT				
Approved for public relea	use distribution unl	imitad		
Approved for public ferea	ise, distribution and	.xuxceu.		
11- SUPPLEMENTARY NOTES	12. SPONSORING	MILITARY ACT	IVITY	
	U. S. Arm	y Electron	nics Command	
	Atmospher	ic Science	s Laboratory	

This is the fifth edition of the White Sands Missile Range Climate Calendar, which was first published in May, 1963.

Mean daily maximum and minimum temperatures, and extreme temperatures for the period of record (1950-1971) are tabulated in calendar form for "A" Station, the forecast center located at Headquarters, White Sands Missile Range, New Mexico. Averages of temperature, relative humidity, wind and cloudiness are included for each month, as well as maximum 24-hour and monthly rainfall.

Supplementary tables give monthly, seasonal and annual values of maximum winds, degree days, solar radiation, means and extremes of station pressure, the greatest monthly and single-storm snowfall, and the average six-hourly relative humidities. Also included are the average number of days with the occurrence of precipitation, distant lightning, thunderstorms, and visibility restrictions.

D POM 1473 REPLACES DO PORM 1475, 1 JAN 64, WHICH IS

UNCLASSIFIED

White Sands Missile Range, New Mexico

*(*:

# WHITE SANDS MISSILE RANGE CLIMATE CALFNDAR

Ву

George M. Fugate

and

John A. Chambers

DR-707

DA Task 1T665702D127-02

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

Approved for public release; distribution unlimited.

### FOREWORD

This report is a revision of Data Report 421, published under the same title in March 1969. The revision updates the original data to cover the period through December 1971.

ii

75-

#### **ABSTRACT**

This is the fifth edition of the White Sands Missile Range Climate Calendar, which was first published in May, 1963.

Mean daily maximum and minimum temperatures, and extreme temperatures for the period of record (1950-1971) are tabulated in calendar form for "A" Station, the forecast center located at Headquarters, White Sands Missile Range, New Mexico. Averages of temperature, relative humidity, wind and cloudiness are included for each month, as well as maximum 24-hour and monthly rainfall.

Supplementary tables give monthly, seasonal and annual values of maximum winds, degree days, solar radiation, means and extremes of station pressure, the greatest monthly and single-storm snowfall, and the average six-hourly relative humidities. Also included are the average number of days with the occurrence of precipitation, distant lightning, thunderstorms, and visibility restrictions.

# ACKNOWLEDGEMENTS

We are indebted to Paul H. Taft who prepared the first four editions of this work. The format and basic contents are largely his effort.

Preceding page blank

# CONTENTS

	PAGE
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
INTRODUCTION	1
DISCUSSION	2
CLIMATE CALENDAR	8-19
FIGURES	
1. Weather Stations, White Sands Missile Range and Vicinity	6
2. Topographic Cross Sections, White Sands Missile Mange	7
TABLES	
I. Temperatures During Coldest Montha, "A" Station	4
II. Temperatures During Warmest Months, "A" Station	4
III. Precipitation Extremes, White Sands Missile Range and Vicinity	5
IV. Monthly and Annual Climatological Data, "A" Station	20
V. "A" Station ClimatographySeasonal Values, 1950-1971	21

# Preceding page blank

#### INTRODUCTION

The weather site designated as "A" Station is in the Headquarters area of White Sands Missile Range (WSMR). Its geographic coordinates are 32° 22.7' North and 106° 28.8' West (Fig. 1). The elevation of the Station Barometer is 4,238.4 feet above sea level. The climatological data in this report are for a period of 22 years, 1950 through 1971, unless otherwise indicated. (Daily temperature means and extremes only have been computed through December 1971.) The station was initially operated by the Air Force, but since April 1961, it has been manued by U. S. Army personnel.

Temperature, wind, precipitation and relative humidity are measured with instruments mounted on the roof of the weather station building, No. 1510. (The elevation of the floor of the instrument shelter is 4,252 feet.) However, since May 1955 wind measurements have been made by an Aerovane mounted on a 13-foot mast 0.5 miles west--279°--from the station, (elevation of Aerovane, 4,304.05 feet) with indicators and recorders for wind speed and direction installed in the weather station building.

Temperature extremes are the highest (maximum) and the lowest (minimum) temperatures which have occurred for each day of the year for the period of record. Temperatures are given in degrees Fahrenheit, wind speeds are in knots, and rainfall and snowfall are reported in inches.

The data in this report are considered to be representative of the Headquarters area. However, due to the great extent and extreme variations in elevation and topography of WSMR (4,000 square miles, from dry lake beds--"playas"--at 3,900 feet to mountain peaks near 9,000 feet, Fig. 1 and 2) conditions in other parts of the range may vary widely. For example, the record low temperature for this station is 6° below zero, while at White Sands National Monument it is 25° below zero, and both of these records occurred on the same date--11 January 1962. Also, severe local thunderstorms may produce torrential rainfall in a comparatively small area with little or no rainfall a few miles distant. On 4 July 1961, 1.80" of rain fell in 48 minutes at "A" Station and the 24-hour total was 2.31", while at Orogrande, 24 miles east, the total rainfall for that day was only 0.02".

The greatest 24-hour rainfall of record on the Range occurred at White Sands National Monument on 21-22 September 1941, with a fall of 5.30". Of this amount, 4.28" fell in five hours--1430-1930 MST, 21 September. This, however, was a general storm, with rainfall totals at a few other stations on or near WSMR as follows: Alamogordo, 2.60"; El Paso Airport, 3.42"; Las Cruces, 4.61"; Orogrande, 3.27", Tularosa, 4.75". The greatest 24-hour rainfall of record at "A" Station is 4.25", which fell on 23-24 August 1959. (See Table III.)

#### DISCUSSION

# COLD SEASON (NOVEMBER-APRIL) WEATHER

December and January are the coldest months, with nearly identical mean temperatures. (See Table I.) February averages nearly 4° warmer, but it has the same low temperature record as December. The record low temperature, (-6°) occurred on 11 January 1962, when absolute record minima were established at most stations in southern New Mexico, during an extremely severe cold spell.

The average number of days with miminum temperatures at or below freezing is 38, and with 20° or less is only three. The earliest date of the last freezing temperature in spring occurred on 14 February 1950 (see Table V), while the earliest date of a 90° temperature was 14 April 1963. The record high temperature for the cold season, 94°, was recorded on 22 April 1965. Average date of the first fall freeze is 20 November.

Only 30% of the annual rainfall occurs during the cold season, and April (the second driest month) and November (the third driest) altogether account for only 7% of the annual total. This 6-month period averages only three days with the occurrence of thunderstorms out of the annual total of 43 days. The three coldest months receive 77% of the annual snowfall total of 6.0 inches.

April, the windiest month of the year, has an average hourly wind speed of 8.7 knots. Visibility is reduced to 6 miles or less (by fog, snow, blowing dust, etc.) on an average of 21 days a ring this season. Five of these days occur in March and four in April, while the total for the year is 36 days. (See Table IV).

#### WARM SEASON (MAY-OCTOBER) WEATHER

Although June and July are the warmest months, August is only slightly cooler (see Table II). The average number of days with a temperature of 100° or more is only 7, three each in June and July, and one in August. Only in occasional years do such high temperatures occur in May, and none have been recorded in September at this station. The greatest number of successive days with 100° or more is 8, from 26 June to 3 July 1960. However, 18 successive days with 99° or more occurred from 24 June to 11 July 1951. It was during these two periods that the absolute record high temperature of 106° occurred four times.

Maximum temperatures at Desert Station (near Army Block House) average about 1.2° higher than at "A" Station during the summer months, so that 100° temperatures can be expected in that area on an average of about 12 days each summer. At Orogrande, about 24 miles east of WSMR Headquarters, summer temperatures average about four degrees higher than at this station, and the absolute record high temperature for Orogrande, 116°, equals the record high temperature for the entire state of New Mexico.

The lowest maximum temperature of occurrence for any year was in 1959, when 99° was recorded only twice. The average number of days with maximum temperature of 90° or more is 84, sixty-seven of which occur during the three warmest months. The carliest date of 95° reading was 11 May 1962, and the average date is 2 June. The latest occurrence of 95° in late summer was on 27 September 1951, and the average date is 4 September, while thre are thirty-six days per year when a maximum of 95° or more is recorded. October mean temperatures are within one degree of the annual mean.

May (the driest month) and June are, on the average, quite dry. Collectively, they contribute only 11% of the total annual rainfall. July, August and September, the wettest months of the year, account for 50% of the average annual rainfall of 10.30", and for 66% of the thunderstorms. Seventy percent of the annual rainfall occurs during the warm season and all but three of the 43 days with thunderstorms. The greatest monthly rainfall of record at this station, 7.42", occurred in June, 1966. The driest year of record was 1956, with a rainfall total of only 3.92", (see Table III.).

Augu:t, with an average hourly vind speed of 4.7 knots is the least windy month of the year, while the annual average is 6.1 knots. The prevailing wind direction for 11 of the 12 months is west, but for July it is southeast. Visibility of 6 miles or less occurs on 15 days during the warm season.

		TEMPERAT	URES (°F)		
COLDEST PERIODS	MEAN MAX	MFAN MIN	MEAN	HIGH- EST	LOW- EST
MONTH OF DECEMBER MONTH OF JANUARY MONTH OF FEBRUARY COLDEST 30 DAYS, 12/20 to 1/18 COLDEST 15 DAYS, 1/3 to 1/17 COLDEST 7 DAYS, 1/8 to 1/14	56.0 56.3 60.0 54.3 54.1 53.7	34.7 34.6 37.6 32.6 32.2 32.0	45.4 45.5 48.8 43.5 43.2 42.9	77 73 81 73 73 73	8 -6 8 -6 -6

TABLE I. TEMPERATURES DURING COLDEST MONTHS, "A" STATION

		TEMPERATURES (°F)					
WARMEST PERIODS	MEAN MAX	MEAN MIN	mean	HIGH- EST	LOW- EST		
MONTH OF JUNE MONTH OF JULY MONTH OF AUGUST	92.8	69.0	80.9	106	50		
	93.3	70.5	81.9	106	59		
	91.1	68.8	80.0	103	35		
WARMEST 30 DAYS, 6/18 to 7/17	94.4	71.0	82.7	106	59		
WARMEST 15 DAYS, 6/19 to 7/3	95.2	71.5	83.4	106	59		
WARMEST 7 DAYS, 6/22 to 6/28	95.5	72.2	83.9	106	62		

TABLE II. TEMPERATURES DURING WAPMEST MONTHS, "A" STATION

The following tabulations show the precipitation extremes (greatest and least) of record for White Sands Missile Range and vicinity:

	_				
PRECIPITATION EXTREMES, "A" STATION, WHITE SANDS MISSILE RANGE					
0.38 inch 8 winutes 1412-1420MST, 27 July 1965					
1.80 inch 48 minutes 1530-1618MST, 4 July 1961					
2.92 inches 3 hours 0050-0320MST, 24 August, 1959	-				
i 3.1/ inches — b hours — — 2245-0445MST, 23-24 August, 195	)				
3.72 inches 12 hours 1645-0445MST, 23-24 August, 1959	)				
4.25 inches 24 hours 2210-1925MST, 23-24 August, 1959	,				
Greatest annual rainfall: 20.02 inches in 1958.					
Least annual rainfall: 3.92 inches in 1956.					
Longest dry spell	ı				
(no measurable rainfall): 123 days, 2/10-6/11, 1956.	I				
Second longest dry spell: 80 days, 10/8-12/26, 1954.					
Greatest seasonal snowfall: 24.5 inches, 1967-1968.					
Greatest annual snowfall: 18.5 inches, 1960.					
HEAVIEST RAINFALL OF RECORD, WHITE SANDS NATIONAL MONUMENT [3]					
0.95 inch 30 minutes 4.28 inches 5 hours					
1.50 inch 1 hour 4.40 inches 6 hours					
2.50 inches 2 hours 5.17 inches 12 hours					
3.50 inches 3 hours 5.30 inches 24 hours, 9/21-22/	1				
PRECIPITATION EXTREMES, NEW MEXICO STATE UNIVERSITY, LAS CRUCES [	3]				
Extremely heavy rainfall occurred at the University station from					
11:05pm 29 Aug. to 7:00am 30 Aug., 1935, measured as follows:	1				
0.64 inch 5 minutes 2.77 inches 60 minutes					
1.06 inch 10 minutes 4.15 inches 2 hours					
1.50 inch 15 minutes 4.77 inches 3 hours					
1.86 inch 20 minutes 5.91 inches 4 hours					
2.48 inches 30 minutes 6.46 inches 7 hours 55 minute	3				
Greatest 24-hour rainfall: 6.49 inches, 29-30 August, 193					
Greatest monthly rainfall: 7.53 inches, September, 1941					
WETTEST AND DRIEST YEARS, NEW MEXICO STATE UNIVERSITY					
15.05 inches in 1881, La Mesilla 13.26 inches in 1931, NMSU					
17.09 inches in 1905, NMSU 19.60 inches in 1941, NMSU					
14.35 inches in 1926, NMSU 14.01 inches in 1958, NMSU					
3.61 inches in 1860, Ft. Fillmore 4.02 inches in 1910, NMSU					
3.49 inches in 1873, Ft. Selden 3.81 inches in 1953, NMSU					
4.47 inches in 1892, NMSU 3.62 inches in 1964. NMSU					
HEAVIEST SHOWFALL OF RECORD, NIW MEXICO STATE UNIVERSITY					
Greatest Monthly Greatest 24-hours					
January 4.7 inches in 1947 4.7 inches in 1947					
February 10.4 inches in 1956 9.0 inches in 1956					
March 2.7 inches in 1944 2.7 inches in 1944					
! Wavenham					
November 5.0 inches in 1957 5.0 inches in 1957 December 10.3 inches in 1931 9.0 inches in 1931					

TABLE III. PRECIPITATION EXTREMES, WSMR AND VICINITY

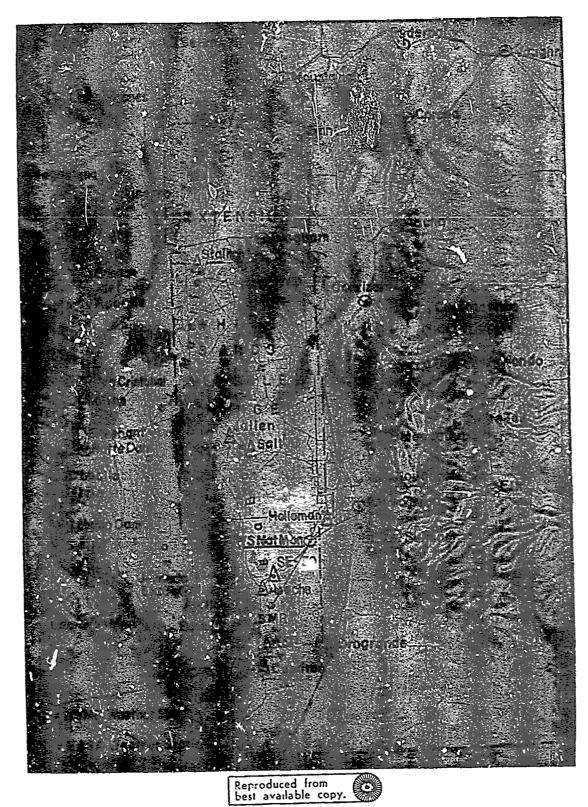
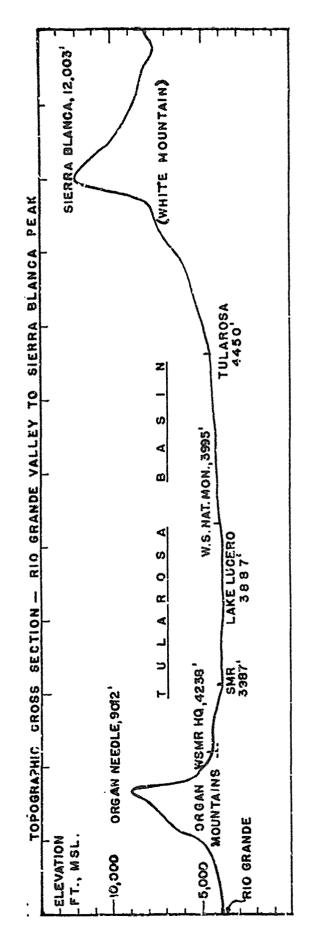
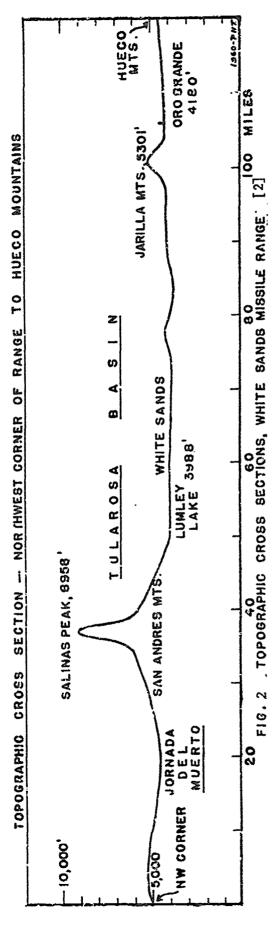


FIGURE 1. WEATHER STATIONS, WHITE SANDS MISSILE RANGE AND VICINITY





"A" STATTON, WHITE SANDS MISSILE RANGE.

DAILY TOAPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE
MONTELY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES α

JANUA	>+ %	MONTHLY	SUR	S S	E B	CLIMATOLOGICAL	DATA. W	EAT STATE	PALL EXTREMES	ה	ANUAR	×
AVG. HIGH	7'5	MAYG. HIGH	7,5	AVG. AIGH	775	AVG. HIGH 54	A WAVG. HIGH	H SA	AVG. HIGH	75	AVG. ILIGH	75
HIGHEST	62	HIGHEST	5	<b>.</b> F	61	ST		67	HIGHEST	69	HIGHEST	71
YEAR	1956	NEW T	13	YEAR	1954	YEAR 1965	S TEAR	1965	YEAR	1965	YEAR	1969
-		VI		7)	1	<u>a</u>	===		<b>D</b>			-
AVG. LOW	6	AVG. LOW		AVG. LOW	en ;	Mo		۲ 32	AVG. LOW	32	AVG. LOW	32
3T	21	12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	21	LOWEST	21	H	_	II	LOWEST	σ,	LOWEST.	13
	1970	=	1970	TEAR	1970	YEAR 1971	1   YEAR	1971	YEAR	1971	YEAR	1971
AV 3. HIGH	54	<del> </del>	54	AVG. HIGH	54	AVG. HIGH 54		H 54	AVG. HIGH	54	AVG. HICH	55
EST	70	_	68	HIGHEST	73	HIGHEST 69	9 HIGHEST	72	HIGHEST	77	HIGHEST	70
YEAR	1969	TEAR	1953	TEAR	1953	TEAR 1953	3 TEAR	1953	YEAR	1953	YEAR	1969
		<b>თ</b>	_	<u></u>	_	*		N	M		<u> </u>	
AVG. LOW	CC	AVG. LOW	32	MOI TOW	32	AVG. LOW 32	2 AVG. LOW	32	AVG. LOW	32	AVG. LOW	33
ES.	) L	LOWE	14	LOWEST	-2	LOWEST -6	6 LOWEST	7	LOWEST	8	LOWEST	13
	1969	_	1967	YEAR	1.962	19		1962	YEAR	1963	YEAR	1964
AVG. HIGH	55	AVG. HIGH	55	AVG. HIGH	56	AVG. HIGH 56	Ť	3H 56	AVG. HIGH	57	AVG. HIGH	57
HIGHEST	/9	HIGHES	69		71	HIGHEST 7.	4 HIIGHEST	20	HIGHEST	73	HIGHEST	72
YEAR	1957	YEAR	1967	YEAR	1971	YEAR 197	1 TEAR	1959	YEAR )	1261	YEAR 🕽	1971
Ω	_	1	i			0		D	S V	,		ò
AVG. IOW	33	AVG. LOW	34		34	MQ.		35	AVG. LOW	36	AVG. LOW	9 9
ST	19		21	LOWEST	22	ST	-	22	LOWEST	16	LOWEST	23
YEAR	1964	YEAR	1964	YEAR	1964	YF' 9 1960	$\exists$	1963	YEAR	1963	YEAR	1963
AVG. HIGH	5	AVG. HIGH	58	AVG. HICH	58	AVG. HICH 59	<u> </u>	H 59	AVG. HIGH	9	AVG. HIGH	9
HIGHEST	73	HICHEST	73	HIGHEST	2/6	HIGHEST 7	2 HICHEST	7.5	HIGHEST	71	HIGHEST	69
XEAR	1967	YEAR - 1950	1950	TEAR 3	1970	YEAR 5 1952	YEAR	1953	YEAR O	1970	YEAR 3 D	1971
		つし		てい		S		n	7		J	
AVG. LOW		AVG. LOW	37	MG	37	Š	_		AVG. LOW	38	AVG. LOW	38
LOWEST	13	<u>§</u>	16	Š	18	E+		22	I.S	21	LOWEST	24
YEAR	1966	YEAR	1966	YEAR	1963	TEAR 1963	3   YEAR	1966	IYEAR	1966	YEAR	1963
AVG. HIGH	9	AVG. HICH	9	AVG. HIGH	9		1	E 56.5		WIND S	5.8	KNOTS
HIGHEST	73	HIGHEST	73	HIGHEST	73	AVG. MINIMUM	TEMPERATURE	E 34.6	•	_	DIR	WEST
YEAR	1967	TEA	1967	YEAR	1971	RECORD HIGH TEMPERATURE	TEMPERATURE	_	· ·		0.44	A
N N				ŋ		RECORD LOW TEMPERATURE	<b>EMPERATURE</b>	9	•		SNOWFALL 0.9	ă.
AVG. LOW 38	38	AVG. IOW 38	38	AVG. LOW	38	AVG. RELATIV		45	% AVERAGE		CIOUDINESS 4	100
LOWEST	28	Š	20	ILOWEST VTA P	1051	GREATEST MON	PONTHLY RAINFALL	1.1. 0.50 1.1. 0.96	D IN. YEAR	R 1960	DATE	11th
	<b>-</b> 31	1111111	42.4		42 24 4 2 24	Ę				10		
* ABSOLUTE	***	RECORD LOW TEMPERATURE	MPEK	S SI	STALTON	GREATES J	JANUAKI SNUWFALL	rAnn:	ru.	00		

"A" STATION, WHITE SANDS MISSILE RANGE DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

80 1957 | 104 104 TEAR 281950 1964 9 80 1968 21 1965 69 20 1964 40 1964 N'EN FEBRUARY 10.30 5.7 36 AVG. HIGH AVG. HIGH AVG. LOW LOWEST AVG. HIGI HIGHEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST YEAR YEAR YEAR AVG. YEAR IN.; ANNUAL IN.; ANNUAL ANNUAT, ANNOAL ANNUAL **4**1957 YEAR 2 7968 AVG. LOW 39 37 22 1955 18 1963 1968 1955 33 33 AVG. HIGH 62 MONTHLY SUPERARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES AVG. LOW AVG, HIGH AVG. HIGH AVG. HIGH 0.55 HIGHEST HIGHEST HIGHEST HIGHEST 37 LOWEST . S COMEST LOWEST AEST. LOWEST YEAR YEAR AVG. YEAR YEAR YEAR AVERAGE MONTHLY CLOUDLINESS AVERAGE MONTHLY WIND SPEED MAG. LOW PREVAILING WIND DIRECTION AVG. LOW 300 I 72. 1962 10W AVERAGE MONTHLY RAINFALL 1963 AVERAGE MONTHLY SNOWFALL 1.44 IN., YEAR 1957, DATE 28th 29 37 24 1955 60 37 16 1963 1955 62 29 1952 AVG. HIGH HIGHEST 1950 AVG. HIGH AVG. HIGH AVG, HIGH AVG. LON HIGHEST HIGHEST TOHEST LOWEST COMEST COMEST EARLIEST DATE OF LAST FREEZING TEMPERATURE IN SPRING, YEAR YEAR YEAR TEAR CEAR AVG. TEAR 25 1954 P 59 1963 9 1956 17 1958 37 26 1960 1963 1960 81 61 **©**§ AVG. HIGH AVG. HIGH AVG. HIGH AVG. HIGH HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST YEAR YEAR YEAR YEAR YEAR YEAR AVG. YEAR AVG. AVG. 60.0° 37.6° 39 24 1968 LOW 120 10 1962 h 29 9 1953 76 1960 1956 1970 1956 37 24 196E 59 61 AVERAGE MAXIMUM TEMPERATURE AVERAGE MINIMUM TEMPERATURE RECORD MINIMUM TEMPERATURE RECORD MAXIMUM TEMPERATURE AVG. HIGH HIGHEST AVERAGE RELATIVE HUMIDITY GREATEST MONTHLY RAINFALL GHEATEST 24-HOUR RAINFALL AVG. HICH AVG. HIGH AVG. HIGH AVO. LOW LOWEST AVG. LON AVG. LOW HIGHEST HIGHEST HIGHEST LOWEST LOWEST LAMEST YEAR YEAR YEAR YEAR YEAR YEAR YEAR AVG. **6**1971 1963 YEAR 23 38 38 24 37 18 1967 ç 9 1961 39 1951 AVG. HIGH 59 HIGHEST 72 1966 1965 AVG. HIGH 60 AVG. LOW LOWEST AVG. HIGH AVO. LOW LOWEST AVG. LOW HIGHEST HIGHEST HIGHEST LOWEST LOWEST YEAR YEAR YEAR YEAR TEAR YEAR YEAR 1971 201956 201956 38 3 3 1954 1963 9 37 25 1971 1951 38 23 1957 9 9 40 29 1956 62 67 1955 1951 \*\* 14th; AVG. EOW AVG. HIGH AVG. HICH AVG. HIGH AVG. HIGH AVG. LOW HIGHEST HIGHEST HICHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST COMEST OMEST YEAR YEAR YEAR YEAR YEAR YEAR YEAR YEAR YEAR AVG. TEAR

"A" STATION, WHITE SANDS MISSILE RANGE DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE IN SIMMADY OF AVERAGE CLIMATOLOGICAL DATA WITH BAINFALL EXTERMES

MONTHLY SUMMARY AVG. HTGH 62 MAY
77 HIGH
1967 YEAR "
24 LOWES
H
1.960 TEAR
. ΔΔΩ
65 AVG, HIGH
43 KVG. I
1969 KEAR
68 AVG. HI
84 HIGHEST
R 3 1971 TEAR
45 AVG. I
ន្ទ
-
IΑV
81 HIGHEST
R 7 1971 YEAR
0.0
19
FREEZING TEMPERATURE

"A" STATION, WHITE SANDS MISSILE RANGE

1969 INCH INCH AVG. HIGH AVG. HIGH AVG. LOW LOWEST HIGHEST LOWEST COWEST LOWEST YEAR YEAR YEAR AVERAGE MONTHLY CLOUDINESS DATE AVERAGE MONTHLY RAINFALL SNOWFALL 1965 52 36 1962 1959 1968 85 1969 42 1953 DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES AVG. HIGH AVG. LOW LOWEST HIGHEST HIGHEST HIGHEST HIGHEST PREVATLING WIND 1952 AVERAGE MONTHLY LOWEST LOWEST LOWEST AVERAGE MONTHLY YEAR TEAR YEAR YEAR YEAR YEAR YEAR TEAR YEAR 26<sup>1950</sup> **19**1962 **2**<sup>1971</sup> 73 86 1970 43 51 37 1964 1971 AVG. HIGH AVG. HIGH AVG. HIGH AVG, LOW LOWEST HIGHEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST AVG. YEAR 0.95LN YEAR YEAR YEAR YEAR YEAR AVG. AVG. 1954 1961 55 45 1967 1964 34 89 54 42 1971 74 83 1951 TEMPERATURE AVERAGE MINIMUM TEMPERATURE RECORD MAXIMUM TEMPERATURE RECORD MINIMUM TEMPERATURE AVERAGE RELATIVE HUMINITY AVG. HIGH AVG. HIGH MONTHLY RAINFALL 24-HOUR KAINFALL AVG. HIGH 76 MAVG. HIGH 54 AVG. LOW HIGHEST THEEST TGHEST HIGHEST AVG. LO LOWEST LOWEST COMEST OWEST TEAR YEAR YEAR YEAR TEAR YEAR YEAR 1959 A 201 73 86 1954 AVERAGE MAXIMUM 86 1969 1960 50 1968 35 74 55 36 06 AVG. HIGH AVG. HIGH AVG. HIGH GKEATEST GREATEST TEMPERATURE REACHED TOHEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST LOWEST YEAR TEAR YEAR YEAR EAR YEAR AVG. 1966 50 91 43 1968 1964 9/ 1970 1961 AVG. HIGH O AVG. HIGH AVG. HICH AVG. HIGH ION HIGHEST HIGHEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWINGT LOWEST LOWEST AVG. YEAR YEAR YEAR TEAR YEAR YEAR YEAR TEAR TEAR DATE 22 1965 LOW SEE 46 40 50, 1963 53 42 1956 55 46 55 45 73 82 1962 94 78 1961 1951 EARLIEST 1952 87 田田田 AVG. HIGH WG. HIGH VG. HIGH AVG. LOW HIGHEST HIGHEST HIGHEST HUREST HOHEST œ LOWEST LOWEST AVG. LO LOWEST LOWEST LOWEST \* YEAR YEAR **TEAR** 

"A" STATION, WHITE SANDS MISSILE RANCE

23rd 7.9 KNOTS 1952 1970 1961 1953 60 1956 696 PREVAILING WIND DIR. AVG. HIGH YEAR 28 AVERAGE CLOUDINESS AVG. HIGH AVG. LOW LOWEST HIGHEST AVERAGE SNOWFALL LOWEST HIGHEST HIGHEST LOWEST HIGHEST AVERAGE RAINFALL YEAR LOWEST YEAR YEAR YEAR AVG. WIND SPEED TEAR YEAR 1959 1959 98 201969 ||-||AVG. LOW 1,0WES'' 1950 1951. 1960 102 60 45 88 86 43 93 1960 1953 1962 696 YEAR AVG. HIGH YEAR 2 MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH PAINFALL EXTREMES AVG. HIGH AVG. LOW AVG. HIGH AVG. LOW LOWEST HIGHEST LOWEST 0.95 IN. DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE HIGHEST HIGHEST LOWEST YEAR YEAR YEAR YEAR AVG. YEAR 60.5 YEAR 2 6 \*\*\*
AVG. LOW 64 103 38 24 53 1967 100 æ 6 6 6 1952 85 1962 1962 44 1971 92 AVG. LOW ETTEAP AAVG. LOW GREATEST 24-HOUR RAINFALL GREATEST MONTHLY RAINFALL AVG. MINIMUM TEMPERATURE AVG. HIGH 89 AVG. MAXIMUM TEMPERATURE AVG. HIGH RECORD HIGH LEMPERATURE AVG. HIGH HIGHEST 66 AVG. RELATIVE HUMIDITY RECORD LOW TEMPERATURE LOWEST HIGHEST HIGHEST 1954 | YEAR YEAR YEAR YEAR YEAR YEAR 61 AVG. LOW 52 LOWFE TEAR 2 4 1964 TEAR 2 5 1951 AVG. LOW 63 LOWEST 55 LOWEST 54 1968 85 59 87 1953 95 1962 57 39 1953 91 87 AVG. HICH 85 AVG. HIGH 56 AVG. LOW 83 AVG. HICH HIGHEST 59 NAVG. LOW 93 HIGHEST HIGHEST HIGHEST COMEST YEAR 1970 |XEAR 1965 || YEAR \*\* EARLIEST DATE OF 100° TEMPERATURE AT STATION 1953 XEAR 1962 ||YEAR YEAR 1970 |XEAR 1964 1971 1953 97 96 45 89 AVG. LOW LOWEST AVG. HIGH AVG. HIGH HIGHEST AVG. LOW AVG. LOW LOWEST AVG. HIGH AVG. LOW HIGHEST HIGHEST HGHEST HIGHEST COWEST YEAR LOWEST YEAR YEAR YEAR YEAR YEAR YEAR YEAR TEAR 1951 1962 63 57 83 1963 1953 93 59 46 1967 1962 1969 62 AVG. LOW 6. 55 LOWEST 39 87 1967 Selave LOW AVG. HIGH HIGHEST AVG. HIGH 84 AVG. HIGH BZJAVG. HICH HGHEST SHAVG. LOW COMEST HIGHEST 93 HILLEST 90 HIGHEST 47/LOWEST TEAR YEAR YEAR 1969 YEAR 951||YEAR 1956 YEAR 1961 TEAR 291951 65 151964 YEAR 2221965 AVG. LOW 62 83 1962 98 1962 60 1967 AVG. HIGH AVG. HICH ΦĒ AVG. LOW AVG. TITOH TOHEST AVG. HIGH HIGHEST HIGHEST LOWEST OWEST HIGHEST COWEST HIGHEST LOWEST LOWEST TEAR MAY EAR YEAR TEAR YEAR YEAR

· A Company of the majorate of the latter

"A" STATION, WHITE SANDS MISSILE RANGE

INCH INCH 1956 1966 AVG. HIGH 95 1951 AVG. LOW LOW YEAR AVG. HIGH AVG. HIGH AVG. LOW LOWEST 0.88 AVG. LOW 29th HIGHEST HIGHEST FIGHEST HIGHEST AVG. LOWEST LOWEST YEAR TEAR YEAR YEAR YEAR AVERAGE MONTHLY CLOUDINESS DATE PREVAILING WIND DIRECTION AVERAGE MONTHLY RAINFALL SNOWFALL ...**20**1960 271957 72 1950 1959 1956 103 71. 63 1953 103 1966 9 101 62 AVG. HIGH HIGHEST AVG. HIGH DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DAIA, WITH RAINFALL EXTREMES AVG. HIGH HIGHEST 1966 HIGHEST HIGHEST AVERACE MONTHLY AVERAGE MONTHLY 1966 LOWEST LOWEST LOWEST OWEST Thirt YEAR YEAR YEAR YEAR YEAR YEAR YEAR YEAR 103 1970 | 1970 | 100 TOWEST 94 **5** 1967 || ||AVG. LOW TOWES" 10. D 1960 1967 66 56 1970 94 1960 1965 IN. AVG. HIGH AVG. HIGH AVG. HIGH AVG. HIGH AVG. LOW HIGHEST HIGHEST HIGHEST AVG. LO LOWEST LOWEST 2.40 YEAR YEAR YEAR YEAR YEAR YEAR <u>0.69</u> 2 1964 YEAR 25 1951 AVG. IOW 72 72 63 103 1970 1955 1957 1965 96 5.3 AVERAGE MAXIMUM TEMPERATURE AVERAGE MINIMUM TEMPERATURE RECORD MAXIMUM TEMPERATURE RECORD MINIMUM TEMPERATURE AVG. IOW AVERAGE RELATIVE HUMIDITY GREATEST MONTHLY RAINFALL GREATEST 24-HOUR RAINFALL AVG. HIGH AVA. HIGH AVG. HIGH AVG. HIGH HIGHEST TCHEST HIGHEST HIGHEST COMEST COWEST COMEST LOWEST YEAR YEAR YEAR YEAR YEAR YEAR YEAR ABSOLUTE MAXIMUM TEMPERATURE AT STATION 100 L 70 58 1968 . 72 . 63 1965 1960 1962 1965 1962 I YEAR CLOW AVG. HIGH AVG. HIGH AVG. HIGH AVG. HIGH AVG. LOW LOWEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST YEAR YEAR XEAR YEAR YEAR . 2 2 1968 65 96 1956 1969 71 62 1953 1965 1960 1969 59 61 1969 AVG. LOW LOWEST ග AVG. HIGH AVG. HIGH AVG. HIGH AVG. HIGH NVG. HIGH MOT .DAY AVG. LOW AVG. LOW HIGHEST HGHEST HIGHEST HIGHEST TICHEST LOWEST LOWEST OWEST COMEST YEAR YEAR YEAR YEAR YEAR YEAR TEAR YEAR AVG. LOW 0961 1965 1970 1950 69 62 1969 95 62 95 61 1967 1953 1964 91 AVG. LOW AVG. HIGH AVG. HIGH AVG. HIGH AVG. HEGH UN HIGHEST HIGHEST HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST LOWEST TEAR TAR YEAR. YEAR TEAR YEAR AVG.

"A" STATION, WHITE SANDS MISSILE RANGE DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

HTGH 94 HA  1962 Y  1962 Y  1964 L  1971 Y  HTGH 93 A  ST 1951 Y  LOW 71 A  1959 Y  HTGH 94 A  ST 63 L  ST 63 L  ST 63 L  ST 63 L	AVG. HIGH 94  HICHEST 103  YEAR 1966  AVG. LOW 71  LOWEST 62  YEAR 1968  AVG. HIGH 93  HIGHEST 104  YEAR 1958  YEAR 1962  AVG. LOW 71  LOW7ST 65  YEAR 994  HIGHEST 994  HIGHEST 999	AVG. HIGH HIGHEST TEAR LOWEST LOWEST AVG. HIGH HIGHEST TEAR LOWEST TEAR LOWEST TEAR LOWEST TEAR LOWEST TEAR TEAR TEAR TEAR TEAR TEAR TEAR TEA		HEST REST REST REST REST REST REST REST R		HIGH IOW ST 1 HIGH EST 1 IOW IOW	93 104 1951 71 64 1960 93 104 1950 64 64 93
105 1960 1971 1971 1971 1971 1971 1963	EST  TOW ST  LOW EST  LOW ST  LOW ST  LOW EST  L	LOW LOW ST TOWN ST TOW		Or LOW ST.		ST 1 LOW ST 1 LOW ST 1 LOW ST 1 LOW ST 1	104 64 64 64 64 64 64 104 104 105 105 105 105 105 105 105 105 105 105
1960 71 64 1971 105 1951 1963	IOW ST IOW ST IOW ST IOW ST HIGH EST 1	LOW TEST HIGH HIGH HIGH HIGH HIGH HIGH HIGH HIG		O TO THE HEAT NOT		ST HIGH SST LOW ST	951 664 664 93 93 71 71 93 93
71 64 1971 105 1951 71 73 63 63 1969 H 94	ST 1 HIGH EST 1 LOW ST 1	LOW LOW TST WOLLOW TST WOLLOW TST WOLLOW TST TST TST TST TST TST TST TST TST TS		Not Idea Ser Low Ser L		I.OW ST. HIGH SST. LOW ST.	71 664 93 93 71 71 71 71 71 85 93
71 64 1971 105 1951 71 1963	ST 1 HIGH EST 1 ST 1 HIGH EST 1	IOW ST LOW ST SST SST SST SST SST SST SST SST SST		ST HIGH SST ST HIGH		ILOW LOW LOW ST	71 64 66 93 93 71 71 64 64 93
1971 H 93 105 1951 71 1963 H 94 H 94	ST 1 HIGH EST 1 LOW ST 1 EST 1 EST 1 EST 1	HIGH EST TOW TOW ST HIGH		HIGH LOW LOW ST		HIGH EST LOW LOW	64 993 104 158 158 644 644 939
1971 105 1951 71 1969 1963 1963	EST 1 LOW ST 1 HIGH 1	HIGH ST LOW ST HIGH		HIGH SST LOW ST		EST LOW LOW	993 993 104 104 158 64 64 64 650 99
1951 1951 73 63 1969 1963	EST 1 LOW ST 1 HIGH EST 1	HIGH LOW TE TEST TO TEST TO TE		HIGH SST LOW ST		EST LOW LOW	93 104 158 71 64 64 93
105 1951 71 63 1959 H 94	EST 1  LOW ST 1  HIGH EST 1	SST LOW LOW LIGHT HIGH		LOW IOW ST.		EST ST TO	104 158 171 150 150 199
1951 71 63 1969 H 94	ST HIGH EST			LOW TES		Joi Figure	71 71 64 64 93 93
71 63 1949 H 94 100	ST HIGH EST	LOW ST. LOW ST. ST. MIGH		I.Ow St.		<b>3</b> 3 5 5 5	71 64 64 93 93 99
71 63 1949 H 94 100	LOW ST HIGH EST	ST. ST. HIGH SST.		I.OW ST HTGH		IOM IS	71 64 50 93 99
1949 H 94 100	ST HIGH EST	HIGH SST		ST HTGH		3T.	64 93 99 99
1949 H 944 100 1963	HIGH EST	HIGH SST		HTGH			93 93 99 52
100 1963	HIGH EST	HICH SST		AU' HTGH			93 99 52
	EST	EST_	<del></del> -			AVG, HICH	93
	C	<u></u>	<u> </u>			ST	52
-		3		(	.961 ji	YEAR 19	•
	<u>ຼ</u>	7		C N		N	-
<u> </u>	TOM	AVG. LOW	<u>:</u>	AVG. LOW	2	AVG. LOW	2,5
<u> </u>	Ē.	ST		ST	63	ST	62
-		Alberta Character and Assess			556		3
A 50 H	VG. HIGH 93	AVG. HIGH	92	A.VG. HIGH	92	HIGH	92
		HIGHEST	66 III	_	102	HIGHEST 1	102
_		3	-		954	YEAR 5 519	954
	Ω N	Q V	<del></del> ,	V		V	_
	MOT	AVG. LOW	===	AVG. LOW	02	ron	2
=	ST		÷		62		65
==		YEAR 1	=		=		1970
=			93.3	. AVG. WI	INE SP	ELU 4.9 KNOTS	Sis
<u></u>		网	70.5	PREVAII	LING W	:0	
=	есоно итен тем		105 @	• AVERAGE			i,
=	ECORD LOW TEMP	•	59	AVERAGE		0	Ä
=	W. RELATIVE H		43 9	% AVERAGE		DINESS 47	<u> २</u> २
=			5.63	IN., YEAR			<del></del>
=	- 1		2.31	IN., YEAF		7	اء
PAMPERATURE AT	STATICN: 106	ON THRUE	DAYS	IN 1951 AM	D ONE	DAY IN 1960	
	1960 C 10 2 7 7 0 8 8 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	1 AVG. 6 LOWES 9 YEAR 3 AVG. 5 HTGHE 5 LCWES 0 YEAR 7 AVG. 7 AVG. 7 RECOR 0 AVG. 8 GREAT	1 AVG, LOW 70 AVG, LOW 10 AVG, LOW 50 LOWEST 1956 YEAR 1956 YEAR 1956 YEAR 1960 HIGHEST 101 HIGHEST 101 HIGHEST 101 HIGHEST 1960 AVG, LOW 1970 KEAR 1970 YEAR 1970 AVG, LOW 750 HIGH TEMPERATURE RECORD LOW TEMPERATURE AVG. AVG. RELATIVE HOUR RAINFALL AT STATICN: 106° ON THREE	HIGHEST   99   HIGHEST   101     HIGHEST   1963   YEAR   1951     AVG. LOW   70   AVG. LOW   70     I AVG. LOW   70   AVG. LOW   63     I AVG. HIGH   93   AVG. HIGH   92     I AVG. LOW   70   AVG. LOW   70     I AVG. LOW   70   AVG. LOW   70     I AVG. MAXINUM TEMPERATURE   93.3     AVG. MAXINUM TEMPERATURE   59     I AVG. MAXINUM TEMPERATURE   59     AVG. MAXINUM TEMPERATURE   50     RECORD LOW TEMPERATURE   59     AVG. MAXINUM TEMPERATURE   50     AVG. MAXINUM T	1953   YEAR   1953   YEAR   1951   YEAR   1950   AVG. LOW   63   LOWEST   65   LOWEST   1962   YEAR   1956   YEAR   1956   YEAR   1956   YEAR   1956   YEAR   1956   YEAR   1950   YEAR   1950   YEAR   1970   AVG. LOW   70   AVG. LOW   70	AVG. HIGH   94   AVG. HIGH   94   AV. HIGH   95   HIGHEST   196   HIGHEST   196   HIGHEST   196   LOWEST   196   LOWEST   196   YEAR   YEAR   196   AVG. MINIMUM TEMPERATURE   196   AVG. MINIMUM TEMP	AVG. LOW 70   AVG. LOW 70   AVG. LOW 63   LOWEST 65   LOWEST 63   LOWEST 65   LOWEST 1956   YEAR 1955   YEAR 1956   YEAR 1955   YEAR 1956   YEAR 1955   YEAR 1956   YEAR 1954   HIGHEST 102   HIGHEST 103   HIGHEST 104   HIGHEST 105   HIGHES

"A" STATION, WHITE SANDS MISSILE RANGE

dally temperature means and extremes, with year of occurrence

AVG. LOW 68 1968 1951 AVG. HIGH HIGHEST AVG. LOW LOWEST AVC. LOW LOWEST ATC. LOW LOWEST AVERACE SNOWFALL 0.0 MG. HIC HIGHEST IGHEST HICHEST LOWEST AVERAGE CLOUDINESS AVERAGE RAINTALL 1. YEAR YEAR YEAR YEAR PREVATE ING WIND AVG. WIND SPEED 1959 100 1969 1969 1967 AVG. LOW ||AVG. LOW ||LCWEST TEAR YEAR MONTHLY SUMMARY OF AVELAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES ATG. IOW LOWES'S AVG. HIGH AVG. HIGH HIGHEST HIGHEST HIGHEST CWEST YEAR **TEAR** 1969 **D** 1964 YEAR 2 6 1960 68 AVC, LOW 68 59 LOWEST 55 91.1 69 64 1971 AVG. LOW
TOWEST GREATEST MONTHLY RAINFALL GREATEST 24-HOUR RAINFALL AVG. HIGH AVG. HIGH AVG. MINIMUM TEMPERATURE AVG. MAXIMUM TEMPERATURE AVG. LOW HIGHEST RECORD HIGH TEMPERATURE HICHEST HIGHEST HIGHEST RECORD LOW TEMPERATURE AVG. RELATIVE HUMIDITY LOWEST LOWEST YEAR 1966 | YEAR TEAR YEAR AVG. 1969 X.

AVG. LOW. .. 50

VEAP AVG. LOW 62 1969 66 99 93 AVG. HIGH AVG, HIGH AVG. HICH STATION, 1952 FIGHEST TGHEST HIGHEST AVG. LO LOWEST AVG. LU LOWEST COMEST YEAR YEAR YEAR 1969 69 62 62 62 1.968 1967 1950 1951 1967 103 1969 1950 6 LAVG. LOW TEMPERATURE AT KVO. FLHI AVO. ICCO. AVG. HICH NEAR A AVG. LOW LOWEST AVG, HICH AVO, LOW LOWERTY TIGHEST HIGHEST HOPEST HIGHEST LOWEST OMEST XFAR. YEAR BELL TEAR TEAR YEAR MAR EAR. YEAR 68 A7G. IOW 68 AT 6.4 69 707 100 1969 1961 39:1 1971 1967 1966 is lave. Low 6. Lowest 60 LATEST DATE OF 100° AVG. LOW LOWEST AVG. HIGH HISHNST AVG. HIGH AVG, HICH AVG. LOW HIGHEST HIGHES" TOHEST LOWEST LOWEST TEAR TEAR YEAR YEAR YEAR 1970 INEAR 1969 1950 1965 69 6,5 1965 100 1961 QQ1962 1971 107 AUGUST AVG. HIGH AVG. HIGH WG. III'GE AVG. LOW HICENSIT TOHEST HGEST HIGHEST LOWEST LOWEST CIMEST LOWEST OWEST TEAR YEAR YEAR CEAR YEAR YEAR YEAR YEAR

الموافق الموافق المقاطعة والموافق ومايا والمعارض المعارض المعارض والمعارض والمعارض والمعارض والمعارض والمدارة

9<del>7</del> 1970 92 1965 1956 KNOTS 9<u>6</u> 1959 1971 HON HORT AVG. IDW AVG. HIGH AVG. LOW LOWEST 11-12 HIGHEST IIGHEST HGHEST TCHEST CWEST COWEST LOWEST YEA? YEAR YEAR YEAR AVERAGE MONTHLY WIND SPEED AVERAGE MONTHLY CLOUDINESS DATE PREVAILING WIND DIRECTION AVERAGE MONTHLY RAINFALL SNOWFALL S III 65 59 1967 49 1970 87. 1968 1954 47 1951 1971 AVG. HIGH HIGHEST AVG. HIGH HIGHEST AVG. HIGH HIGHEST "A" STATION, WHITE SANDS MISSILE RANGE
DAILY TEMI RATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRINCE
R R MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH RAINFALL EXTREMES AVG. HIGH AVG. LOW LOW LOWEST HIGHEST AVG. IO LOWEST AVERAGE MONTHLY 1958 LOWEST LOWEST YEAR YEAR YEAR YEAR YEAR YEAR 1954 64 63 47 1970 1.970 64 59 1959 1951 1971 1951 1961 94 AVG. LOW LOWEST AVG. HIGH ATG. FOW AVG. HIGH AVG. LOW LOWEST HIGHEST HIGHEST HIGHEST 2.96IN., LOWEST LOWEST YEAR YEAR YEAR YEAR YEAR YEAR YEAR YEAR 86 HT 95 HT 1951 1971-62 51 1971 64 57 63 49 66 53 87 91 1966 84 94 1961 1951 1071 AVERAGE MAXIMUM TEMPERATURE AVERAGE MINIMUM TEMPERATURE RECORD MAXIMUM TEMPERATURE RECORD MINIMUM TEMPERATURE AVG. HIGH HIGHEST AVG. HIGH HIGHEST AVERAGE RELATIVE HUMIDITY CHEATEST MONTHLY RAINFALL GREATEST 24-HOUR RAINFALL AVG. HIGH HIGHEST HIGHEST LOWEST LOWEST LOWEST COMEST YEAR YEAR YEAR YEAR YEAR YEAR TEAR YEAR AVG. 62 50 1971 1951 64 58 1956 63 55 1968 84 94 66 61 95 96 1963 87 1951 1956 1951 AVG. HIGH HIGHEST AVG. HTGH AVG, HIGH AVG. HIGH AVG. LOW LOWEST AVG. LOW AVG . LOW HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST AVG. YEAR YEAR YEAR YEAR YE.A.R. YEAR 93 **23** 1951 | AVG. LOW OWES" 62 47 1970 60 48 88 88 58 1968 64 59 63 1970 1956 1951 1966 67 97 85 83 1951 AVG. HIGH AVG. HIGH HIGHEST VG. HIGH AVG. HIGH AVG. LOW LOWEST AVC. LOW LUWEST AVG. LOW AVG. LOV IIGHEST TGHEST COWEST TIGHEST OWEST YEAR EAR MEAR YEAR EAR TEAR. **YEAR** YEAR 1956 ... 1956 ... AVG. LOW TOWEST 7 , 65 ,58-1966 **Q**1971. 1961 85 92 88 97 64 58 60 48 88 97 67 57 1967 1956 AVG. LOW F. 95 1951 1965 1951 SYEPTEM IVG. HIGH AVG. HIGH AVG. HIGH AVG. HIGH HIGHEST . AVG. LOW HIGHEST HIGHEST HIGHEST OWEST COMEST LOWEST TEAR **YEAR** YEAR YEAR AVG.

DALLY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE

•	остов	E R	MONTHLY	SUM	ARY OF AVERAGE		CLIMATOLOGICAL		DATA, WITH RA	RAINFALL	IL EXTREMES	0	CTOBE	×
	Lag. High	83	AVG. HIGH	83	ато. нтон	82	AVG. HIGH	82	AVG. HIGH	82	GH	-	AVG. HTCH	81
	HIGHEST	91	HIGHEST	88	ST	88	HIGHEST	88	EST		£ST.	06	HIGHEST	87
	YEAR	1951	YEAR	1951	i	1967	YEAR 🔒 1	1956	TEAR 1	1956	YEAR 1956		YEAR	1955
			<b>N</b>		<b>1</b> )		4	(	Ω		Ø		•	1
	AVG. LOW	59	AVG. LOW	65 60 60	AVG. LOW	58	AVG. LOW	2,0	AVG. LOW		ğ	57	AVG. LOW	27
	Ĕ	87	LOWEST	1048	LOWEST	847	3T	1061	ST	=	LOWEST 49		7.5	1050
		1965	IIXEAK	COCT	KEAK	1961		707		1,753		計		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	AVC. HIGH	81	A.G. HIGH	81		80	AVG. HIGH	8	AVG. HIGH	2, 8	품,		AVG. HIGH	78
	ä	96	H.UHEST	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CHEST	68	i S	88	13	_	7	000	Į,	2 0
	TENE	1965		C05T	YEAR	1965	rear a 1	1951	I C TRUIT		SOAT HEET	== 0	TENE	200
			ת ת		<u> </u>				V		<u>ე</u>			9
	A.VG. LOW	57		57	AVG. LOW	57	AVG. LOW	56	AVG. LOW	26	Mo	55	AVG. LOW	55
	LOWEST	77	LOWEST	39	TOWEST	48	댔	48	돐		ST	-	닭	42
	YEAR	1970	YEAR	1970	IXEAR	1951	YEAR 1	1961	YEAR	1970	XEAR 1969	ᄏ	YEAR	1969
	AVG. HIGH		AVG. HIGH	111	AVG. HIGH	11	AVG. HIGH	76	AVG. HIGH	=	HIGH	=	AVG. HIGH	75
	EST	86	HIGHEST	85	HIGHEST	98	EST	82	EST	_	EST	82	EST	85
1	YEAR	1951	YEAR	1950	YEAR .	1952	YEAR O	1969	YEAR 1 C.	1950	YEAR 3 19	1954	YEAR 3	1961
7		; -	0	_		C L	0	2		ç	C V	<del></del>	V	
	AVG. LOW	54	AVG. LOW	54	AVG. LOW	2,	AVG. LOW	200	AVG. LOW	70	ž.	75	AVG. LOW	٦ ·
	댅	45	ILOWEST	53	)WEST	4 1	H	200	ST	==	J.S.	2 :	Į.	43
	YEAR	1966	YEAR	1970	YEAR .	1961		7308		~	YEAR 19/1	17		1964
	AWG. HIGH	52	AVG. HIGH	74	ΔV	73	AVG. HIGH	73	AVG. HIGH	==	HIGH	72	AVG. HIGH	71
		84	HIGHEST	გ ე	臣	83	HIGHEST	86	EST	_	£SŢ	83	HIGHEST	85
	YEAR 3.	3.03650	YEAR 5 2 1959	1959	YEAR 5	1950	YEAR OF	1950	TEAR OF	1968	YEAR O 19	956	YEAR O	1950
			では、	נצ	T U	(	)  -    - 	-	ر الا	S		<u>۔</u>		0,
	TOTAL TOW	70	TOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTOTO	77	4	) r	T.OWEST	2 %	TOWEST	===		38.	TOWEST	, tc
		1965	YEAR	1968	<u> P</u>	1970		1968		964	19	5		1970
	HTCH	7.1	lame, HTGH	70	NAVG. HIGH	70	AVG. MAXIMUM	II	TEMPERATURE 7	76.4	AVG. WIND	11	SPEED 4.9 K	KNOTS
	HIGHEST	83	HIGHEST	ر د د	HIGHEST	85	AVG. MINIMUM		TEMFERATURE 5	53.2	PREVAILING	ING W	WIND DIR.	WEST
-==:	•	1950	•	1950	YEAR	1950	RECORD HIGH		岡		O AVERAGE	RAIN	RAINFALL 0.99	F
	のハ	_	S S		Ŋ		a	THEFT	•	33	7	SNOF		Ä
<b></b>	AVG. LOW		AVG. LOW	48	AVG. LOW	47	AVG. RELAT	H EAL	TITI	ĭ	% AVERAGE	CTO	CLOUDINESS 2	86
	LOWEST	35	LOWEST	36	Et	34	•	THEN	RAINFALL	2,99	•	1955		
	YEAR	1970	lyear	1967	'AR	1956	GREATEST 2	24-HOUR	R RAINFALL	1:91	IN., YEAR	1955	DATE	3-4
	dø latest		DATE OF 90°	TEMPERAT	TURE AT	STATION	V. 1965.							
1							.			_				

28 1970 || 28 || AVG. IOW 1955 AVERAGE DATE OF FIRST FREEZING TEMPERATURE. TNCH 0.42 INCH AVG. LOW LOWEST AVG. HIG NOVEMB HEEST HIGHEST 30 8th HIGHEST OWEST LOWEST YEAR YEAR YEAR YEAR YEAR TEAR AVERAGE MONTHLY CLOUDINESS DATE PREVAILING WIND DIRECTION YEAR 20 1966
AYG. LOW 40
LOWEST 26 HICHEST 72 YEAR 2 1950 AVG. LOW 3E AVERAGE MONTHLY RAINFALL AVERAGE MONTFILY SNOWFALL 1950 38 24 1952 44 29 1959 40 26 1969 1965 42 34 65 63 29 1961 AVG HIGH HIGHEST YEAR AVG. LOW LOWEST DAILY TEMPERATURE MEANS AND EXTREMES, WITH YEAR OF OCCURRENCE MONTHLY SUMMARY OF AVERAGE CLIMATOLOGICAL DATA, WITH MAINFALL EXTREMES AVG. LOW LOWEST AVG. HIGH AVG. HIGH YEAR 1961 HGHEST HIGHEST AVERAGE MONTHLY LOWEST YEAR YEAR YEAR YEAR AVG. LOW
ST TEAP 1952 1971 9/ 1970 65 1950 68 AVG. HIGH 75 HIGHEST AVG. HIGH AVC. HIGH AVG. HIGH HICHEST YEAR 0.89IN., LOWEST TEAR YEAR 41.3 1968 XEAR 1967 | YEAR 25 XF. 75 XF. (AVG. LOW LOWEST ||AVG. LOW 43 22 45 65 42 1950 1956 9 1958 4\*\***4** AVERAGE MINIMOM TEMPERATURE TEMPERATURE RECORD MAXIMUM TEMPERALTURE RECORD MINIMUM TEMPERATURE EARLIEST DATE OF FIRST FREEZING TEMPERATURE, 1967. YEAR AVG. HIGH AVG. HIGH GREATEST MONTHLY RAINFALL AVERAGE RELATIVE HUMIDITY REATEST 24-HOUR RAINFALL AVG. HIGH HIGHEST TGEEST LOWEST COMEST YEAR YEAR YEAR TEAR AVG. LOW.

YEAR AVERAGE MAKIMUM 24 1965 IOW 30 1 28 1959 65 9 1970 81 AVG. HIGH AVG. HICH AVG. HIGH AVG. HIGH AVG. LOW HIGHEST HIGHEST HIGHEST LOWEST LOWEST LOWEST YEAR YEAR YEAR YEAR YEAR YEAR 75 23 365 10W TOWES" 1966 . **6** 41 26 1956 43 28 1952 1966 66 76 1969 1955 9 8 1964 1950 1963 62 7.2 AVG. LOW AVG. HIGH AVG. IGW LOWEST AVG. HIGH AVG. HIGH AVG. HICH MOI TOM HIGHEST HIGHEST HIGHEST HIGHEST LOWEST ICKEST LOWEST YEAR YEAR YEAR YEAR YEAR TEAR YEAR YEAR YEAR 22 1950 |> ||AVG. LOW TOWES" ĸ 1955 1966 62 46 39 1950 1961 1964 69 84 1950 1966 99 43 42 30 1,965 64 H AVG. LOW ILOWEST Ø Z O O E AVG. JOW WG. HIGH AVG. HICH HOHEST IIGHEST HIGHEST LOWEST ネネス LOWEST TEAR TAR

"A" STATION, WHITE SANDS MISSILE RANGE

TRACE OF PRECIPITATION. HEATING DEGREE DAYS. ØØ MEASUREMENTS IN LANGLEYS, MADE ON ROOF OF BUILDING 1744, WSMR HEADQUARTFRS, BY CALIBRATION LABORATORY. H VISIBILITY REDUCED TO 6 MILES OR LESS DUE TO HAZE, DUST AND BLOWING DUST. TABLE IV.

MONTHLY AND ANNUAL CLIMATOLOGICAL DATA, "A" STATION, WSMR HEADQUARTERS

ITEM	WINTER	SPRING	SUMMER	FALL	YEAR
TEMPERATURES (°F) Mean Maximum Mean Minimum Mean Extremes of Record	57.4	75.2	92.4	75.5	75.1
	35.6	52.1	69.4	52.6	52.4
	46.4	63.7	80.9	64.1	63.8
Highest Date	81	103	106	98	106
	2/11/57	5/28/51	*	9/16/51	*
Lowest	-6	16	50	22	6
Date	1/11/62	3/4/65	6/11/65	11/11/50	1/11/62
DEGREE DAYS (Base 65°F)	1655	431	0	442	2528
RELATIVE HUMIDITY (%)	43	27	38	401	37
SURFACE WINDS (Knots) Average Speed Strongest Gusts Month and Year	W 5.9	W 8.2	W 5.5	w 5.0	W 6.1
	SW 82	W, WSW 74	S 60	w 61	SW 82
	12/51	3/51, 5/61	6/62	11/65	Dec. '51
RAINFALL (Inches) Ø Percent of Annual Greatest Monthly Month and Year Greatest 24-Hour Dates	1.74	1.01	4.84	2.71	10.30
	17%	10%	47%	26%	100%
	2.43	3.00	7.42	5.76	7.42
	12/65	3/58	6/66	9/58	6/66
	1.02	1.46	4.25	2.96	4.25
	12/14-15/67	3/5-6/58	8/23-24/59	9/11-12/64	1959
SNOWFALL (Inches) Greatest Monthly Month and Year	4.7	0.5	0.0	0.8	6.0
	14.9	3.5	0.0	6.2	14.9
	12/67	3/58		11/61	1967
CLOUDINESS (%)	38	34	41	29	36
NUMBER OF DAYS WITH: Measurable Rainfall Thunderstorms Visibility < 6 Miles * 0.01" or more	10	9	19	10	48
	1	5	30	8	44
	10	11	9	6	36
STATION PRESSURE Average (Inches of Hg	25.756	25.670	25.731	24.763	24.730

WINTER = Months of December, January, February.

SPRING = March, April, May. SUMMER = June, July, August. Fall = September, October, November.

TABLE V. "A" STATION CLIMATOGRAPHY--SEASONAL VALUES, 1950-1971

With Prevailing Wind Directions. To convert knots to miles per hour, multiply knots by 1.15155.

Four Dates: June 28 & 29, 1951; July 8, 1951; July 2, 1960.

<sup>&</sup>quot;Rainfall" includes water content of snowfall.